

**Amendments to the Specification:**

Please replace paragraph **[0066]** with the following amended paragraph:

**[0066]** The thermal energy  $E_{th}$  created in a subcritical core by an external neutron and absorbed is:

$$E_{th} = E_{fis}\varphi^*/(\nu r_0) \quad (8)$$

in which  $r_0 = (1 - k_{eff})/k_{eff}$  is the level of subcriticality;  $\varphi^*$  is the neutron importance;  $E_{fis}$  is the energy supplied during a fission reaction;  $\nu$  is the average number of fission neutrons. The neutron importance depends a priori on the incident particle energy, i.e.,  $\varphi^* = \varphi^*(E_p)$ . However, in some systems, it is observed that it is possible to assimilate it with a constant. The thermal power of the subcritical core (if energy released in the target is not taken into account) is:

$$P_{th} = (\varphi^* \eta_a Y_n / E_p) P_{cons} E_{fis} / (\nu r_0) \quad (9)$$